

Notice of Allowability

Application No.

09/918,812

Examiner

Michael D Meucci

Applicant(s)

ARIMILLI ET AL.

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 31 October 2003.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 11022004.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 11022004.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Drawings

2. Figure 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Authorization for this examiner's amendment was given in a telephone interview with Antony P. Ng (Reg. No. 43,427) on 11/2/04.

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4. The abstract of the present application have been amended as follows:
 - a. **Please delete** --METHOD AND APPARATUS FOR TRANSMITTING PACKETS WITHIN A SYMMETRIC MULTIPROCESSOR SYSTEM--.
 - b. **Please delete** --An apparatus for transmitting packets within a symmetric multiprocessor system is disclosed--.

5. Examiner has amended the abstract removing the title information and the first sentence of the abstract to overcome the objection as would have been applied in a first office action relating to claim terminology and title information in the abstract. An amended copy of the abstract is attached to this examiner's amendment.

6. The claims of the present application have been amended as follows:
 - a. Claim 1, Line 8: **Please replace** "said master agent" **with** --said master node--.
 - b. Claim 5, Line 10: **Please replace** "said master agent" **with** --said master node--.

7. The following is an examiner's statement of reasons for allowance: The closest art retrieved within the search is Rankin et al. (U.S. 5,613,071) hereinafter referred to as Rankin. Rankin discloses a first request transaction through a remote memory access controller and to a remote node (lines 3-5 of column 9), but not specifically to a plurality of receiving nodes. Rankin teaches a write counter number (lines 1-10 of column 11). Rankin teaches receiving a response from the receiving node at the master not, but not from a plurality of receiving nodes (lines 10-17 of column 7). Rankin teaches sending the data packet from the master node to the remote node, but not according to the combined response and instead with the original request (lines 3-17 of column 7).

The prior art references of record do not teach (alone or in combination) all the limitations together within the independent claims 1 and 5. For example, the independent claims contain limitations of "initiating a new request transaction and write counter number immediately after the data packet has been sent and before an acknowledgement from the receiving node is returned". This, in combination with the remaining limitations of claims 1 and 5 could not be found in the prior art and was not considered obvious in view of the prior art. Therefore, the independent claims 1 and 5 have allowable subject matter and are allowable over the prior art of record. The dependent claims of these claims are also allowable.


8. Claims 1-8 are allowed.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey, can be reached at (571) 272-3896. The fax phone number for this Group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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SUPERVISORY PATENT EXAMINER

Abstract

The symmetric multiprocessor system includes multiple processing nodes, with multiple agents at each node, connected to each other via an interconnect. A request transaction is initiated by a master agent in a master node to all receiving nodes. A write counter number is generated for associating with the request transaction. The master agent then waits for a combined response from the receiving nodes. After the receipt of the combined response, a data packet is sent from the master agent to all intended one of the receiving nodes according to the combined response. After the data packet has been sent, the master agent in the master node is ready to send another request transaction along with a new write counter number, without the necessity of waiting for an acknowledgement from the receiving node.